SIEMENS

MAMMOMAT Novation DR

SP

Software

System

PXCM (BRICK), Version 1.2.2.1

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Introduction

This chapter describes tasks related to using the DirectRay Power and the X-ray Control Module's (PXCM) Web tool.

When PXCM web functions should be used

Restrictions on a function's use are covered in the relevant section of this chapter.

Opening the PXCM Web tool homepage

To open the PXCM Web tool's homepage, the syngo-based acquisition workstation (WH AWS) and the DROC acquisition workstation differ.

- **syngo-based acquisition workstation (WH AWS) from VA11A**

  A link is supplied in the service software to open the PXCM Web tool homepage.

  Acquisition System -> BRICK Configuration

Fig. 1: Start BRICK software

The PXCM homepage opens in an additional Internet Explorer window.

- **syngo-based acquisition workstation (WH AWS) from VA10A**

  Enter the following command in the syngo Service Software **Utilities -> Escape To OS** command line:

  start explorer http://brick

  The PXCM homepage opens in an additional Internet Explorer window.

- **DROC acquisition workstation**

  Click the Netscape Web browser icon on the acquisition workstation and enter the following URL:

  http://brick

  The PXCM home page opens in the Netscape window.

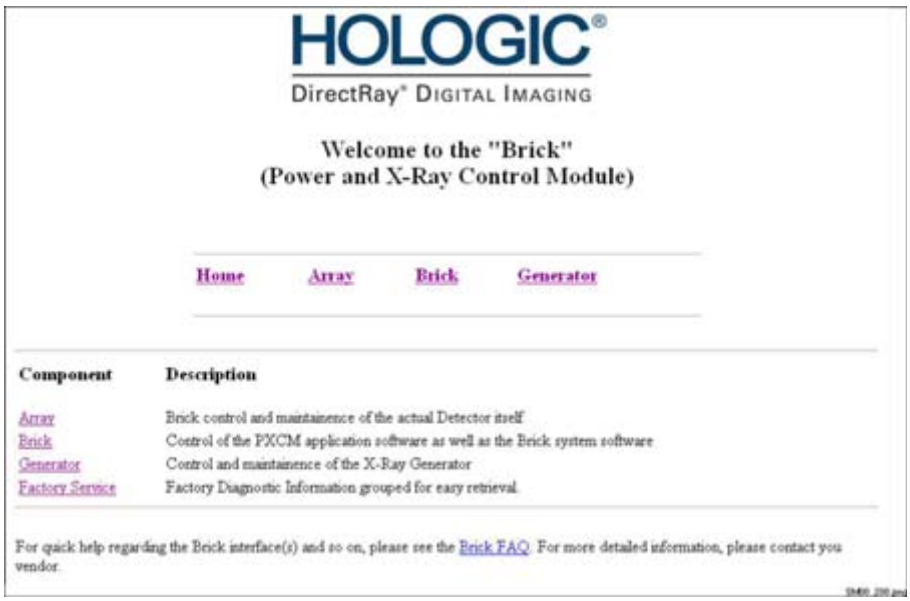

Fig. 2:

Function security levels and login prompts

PXCM Web tool functions are assigned one of three security levels. The security level is indicated on the Security panel at the top of each function's page:

Fig. 3:

Low security level, indicated by a green background. These functions can be used without affecting the related component's operation.

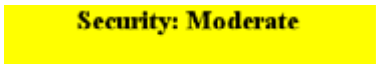

Fig. 4:

Moderate security level, indicated by a yellow background. These functions could affect the related component's operation, but changes would not adversely affect its operation.

Fig. 5:

High security level, indicated by a red background. These functions could affect the related components operation and, if not done properly, could adversely affect its operation.

Any time a user attempts to use a function assigned a moderate or high security level, a login prompt is displayed to verify that he or she is authorized to use the function.

Fig. 6:

The user name and appropriate password have to be entered:

login: **root**

password: ******

Once you have logged into a particular function, you can use it throughout the same PXCM web tool session. You do not have to log into that function again.

Detector (array) functions

NOTE

The DirectRay detector is also referred to as the "array." For this reason, the terms "array" and "detector" are used as synonyms throughout the Web tool and sections of this chapter.

The detector functions are accessible via the **Array Control Panel** page.

To display the **Array Control Panel** page, click the **Array** links on the homepage.

Fig. 7:

Viewing information about the detector

To view information about the **Detector**, click the **Information/Status** link on the **Array Control Panel** page, or the **Info** link on any of the other **Array** pages. The **Array Information - Summary** page appears.

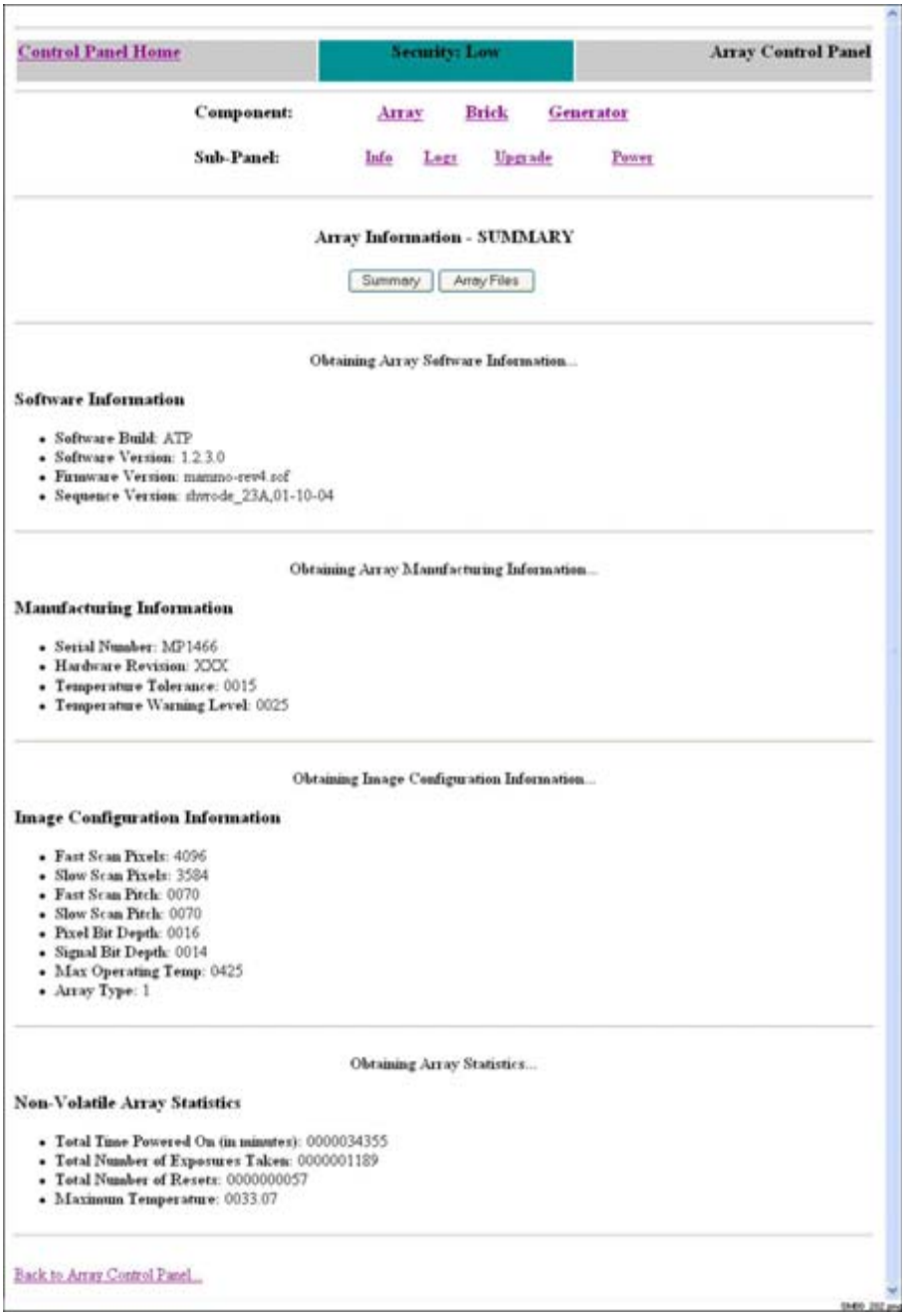

Fig. 8:

To view a listing of the detector files, click the **Array Files** button. A list of detector files is displayed, as shown below. Some file names are links; clicking one of these links displays the contents of the file.

Fig. 9:

Viewing detector log files

NOTE

Detector log file information is intended to help the Siemens Support staff when troubleshooting detector problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view the **detector log files**, click the **Log File(s)** link on the **Array Control Panel** page, or the **Logs** link on any of the other **Array** pages. The **Advanced Search** and **Detailed Log Info** pages are displayed. The operations you can perform from this page are described in (Tab. 1 / p. 10).

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 10:

Tab. 1 Advanced Search and Detailed Log Page operations

To do	Do this
View the currently active log.	Click the **Summary** button.
Search for a text string in the currently active log and display the line in the log file in which it appears.	Enter a search string in the adjacent field, then click the **Search** button.
Display the first or last lines of the currently active log.	Enter the number of lines you want to display in the adjacent field, then click either the **Beginning** or **End** button.
View the current and all previous log files.	Click the **All Log Files** button.

The following screenshot shows an example of the currently active log listing (displayed after clicking the **Summary** button).

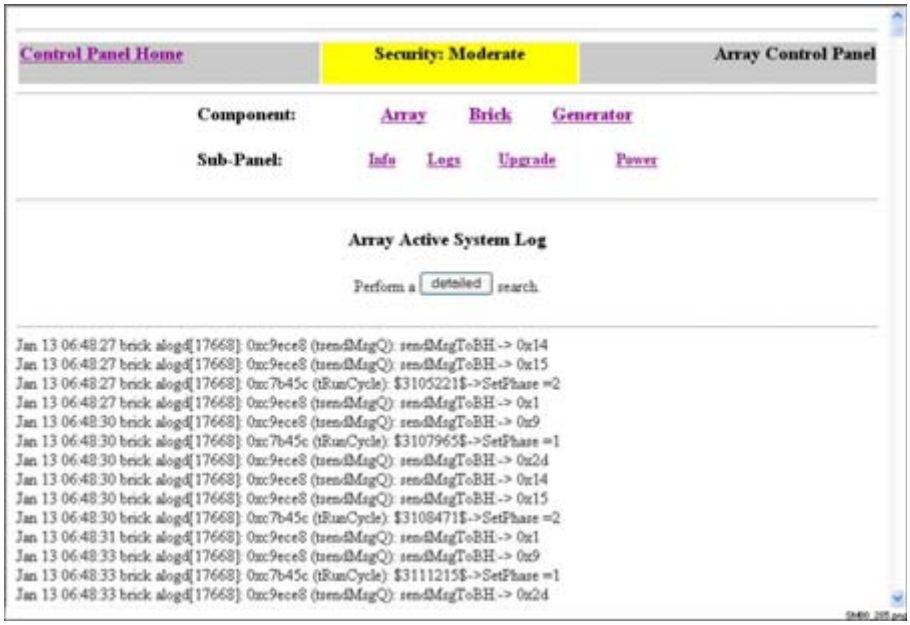

Fig. 11:

To return to the **Advanced Search and Detailed Log Info** page from the active log listing page, click the **Detailed** button.

Upgrading detector software components

NOTE

Usually, you upgrade a detector software component only if you suspect that the current software component is corrupt.

To upgrade one of the detector's software components:

1. Click the **Software Upgrade** link on the **Array Control Panel** page, or the **Upgrade** link on any of the other **Array** pages.

   The **Upgrade Detector Subsystem (Array) Software** page is displayed.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 12:

2. Select the software component that you want to upgrade.

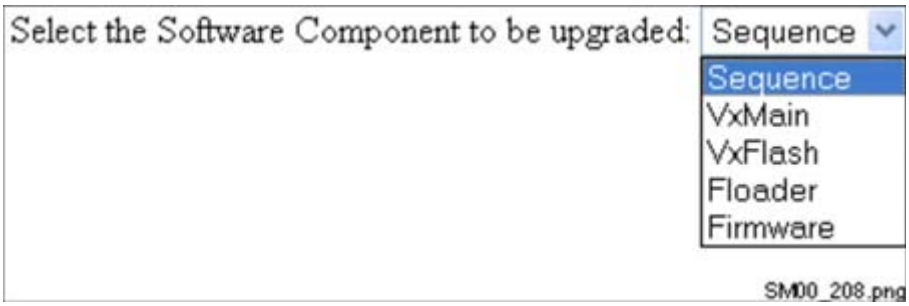

Fig. 13:

3. Click the **Browse** button. Then navigate to the appropriate software component file from your acquisition workstation's file system and select it.

   The file you selected is displayed in the **Please select the file to transfer** field.

⚠CAUTION

The PXCM Web tool does not check whether the appropriate file type has been selected.

➪ **If you select the wrong file for uploading, the PXCM may stop operating.**

NOTE

To clear your file selection, click the "Reset Form" button.

4. When you are ready to start the software file transfer, click the **Upgrade** button.

   The file transfer status is displayed on the page.

5. After the transfer is complete, reboot the detector to start up the software you have just transferred. For more information about rebooting the detector, refer to (Powering the detector on and off / p. 13).

Powering the detector on and off

To power the detector **on** or **off**, or to **reboot** it, click the **Array Power Control** link on the **Array Control Panel page**, or the **Power** link on any of the other **Array** pages. The **Array Power Control** page is displayed. Click the appropriate button of the operation that you want to perform.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 14:

PXCM (BRICK) functions

The PXCM functions are accessible via the **Brick Control Panel** page.

NOTE

The PXCM is also referred to as the "BRICK."

For this reason, the terms "PXCM" and "BRICK" are used as synonyms throughout the Web tool and the PXCM topics in this chapter.

To display the **Brick Control Panel** page, click one of the **Brick** links on the homepage.

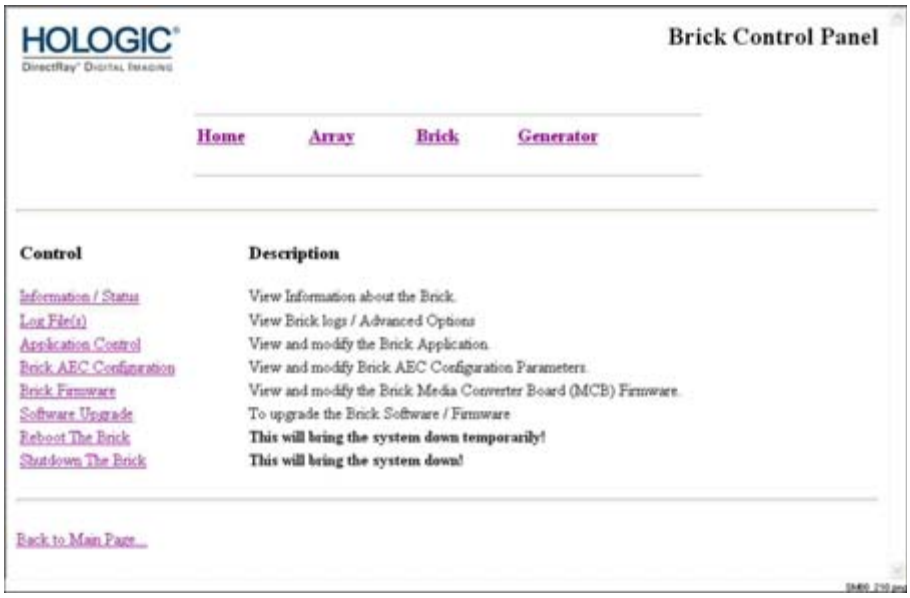

Fig. 15:

Viewing information about the PXCM

To view information about the PXCM, click the **Information/Status** link on the **Brick Control Panel** page, or the **Info** link on any of the other **PXCM** pages. The **PXCM Information - Summary** page is displayed.

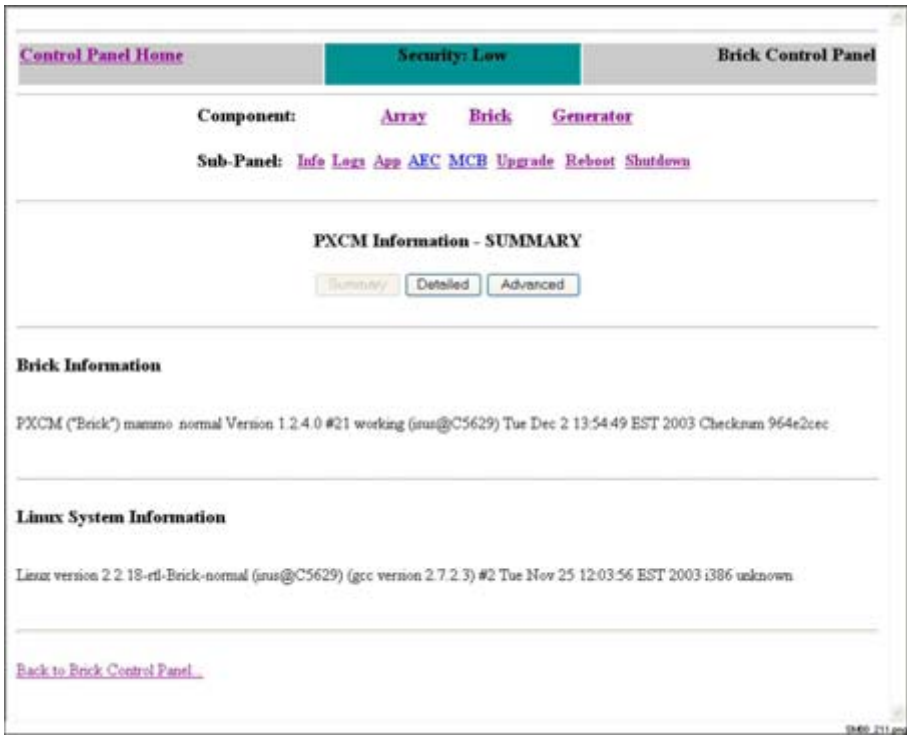

Fig. 16:

To view more detailed PXCM information, click the **Detailed** button. A sample of the **DETAILED PXCM information** is shown on the following page.

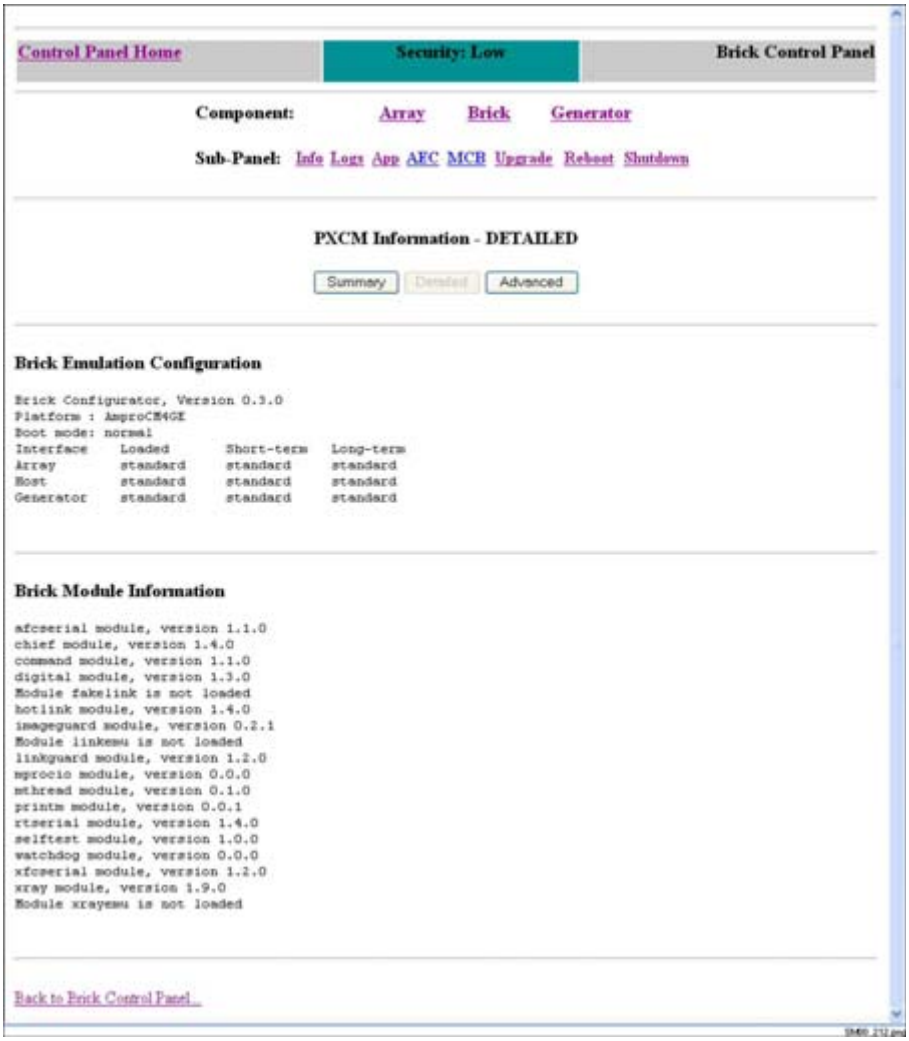

Fig. 17:

NOTE

The PXCM Information page also includes an "Advanced" button for displaying even more detailed information. However, this advanced information is intended only to help the Siemens Support staff when troubleshooting PXCM problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

Viewing PXCM log files

NOTE

PXCM log file information is intended to help the Siemens Support staff when troubleshooting PXCM problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view PXCM log files, click the **Log File(s)** link on the **Brick Control Panel** page, or the **Logs** link on any of the other **PXCM** pages. The **Advanced Search and Detailed Log Info** page is displayed. The operations you can perform from this page are described in Chapter 1 “Advanced Search and Detailed Log Page Operation”.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 18:

The following screenshot shows an example of the currently active log listing (displayed after clicking the **Summary** button).

Fig. 19:

To return to the **Advanced Search and Detailed Log Info** page from the active log listing page, click the **Detailed** button.

Viewing PXCM application information

NOTE

PXCM application information is intended to help the Siemens Support staff when troubleshooting PXCM problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view PXCM AEC configuration information, click the **Application Control** link on the **Brick Control Panel** page, or the **App** link on any of the other **PXCM** pages. The **Brick man - Status** page is displayed.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

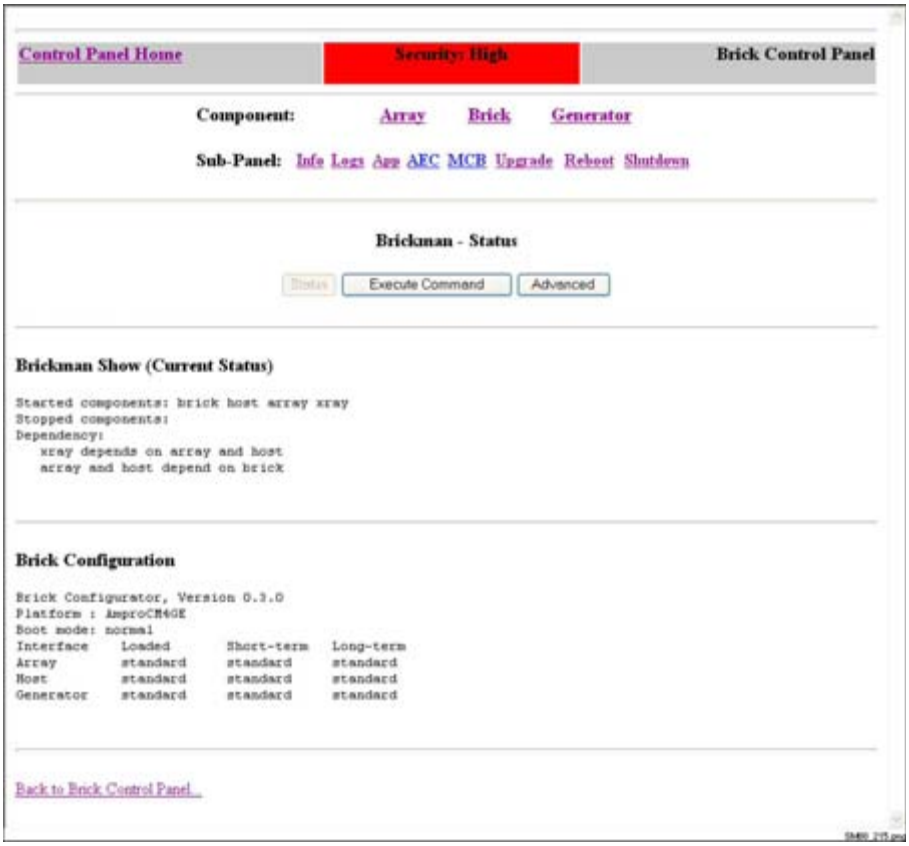

Fig. 20:

⚠CAUTION

The Brick man page also includes an “Execute Command” button and an “Advanced” button. These functions are intended only to help the Siemens Support staff when troubleshooting PXCM problems.

➪ **If these functions are used, PXCM operation may be impaired.**

Viewing PXCM AEC configuration information

NOTE

PXCM Automatic Exposure Control (AEC) configuration information is intended to help the Siemens Support staff when troubleshooting AEC problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view **PXCM AEC configuration** information, click the **Brick AEC Configuration** link on the **Brick Control Panel** page, or the **AEC** link on any of the other **PXCM** pages. The **Brick AEC - Status** page is displayed, as shown on the next page.

⚠CAUTION

The Brick AEC page also includes a "Modify Settings" button. This function is intended only to help the Siemens Support staff when troubleshooting AEC problems.

➪ **If this function is used, AEC operation may be impaired.**

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

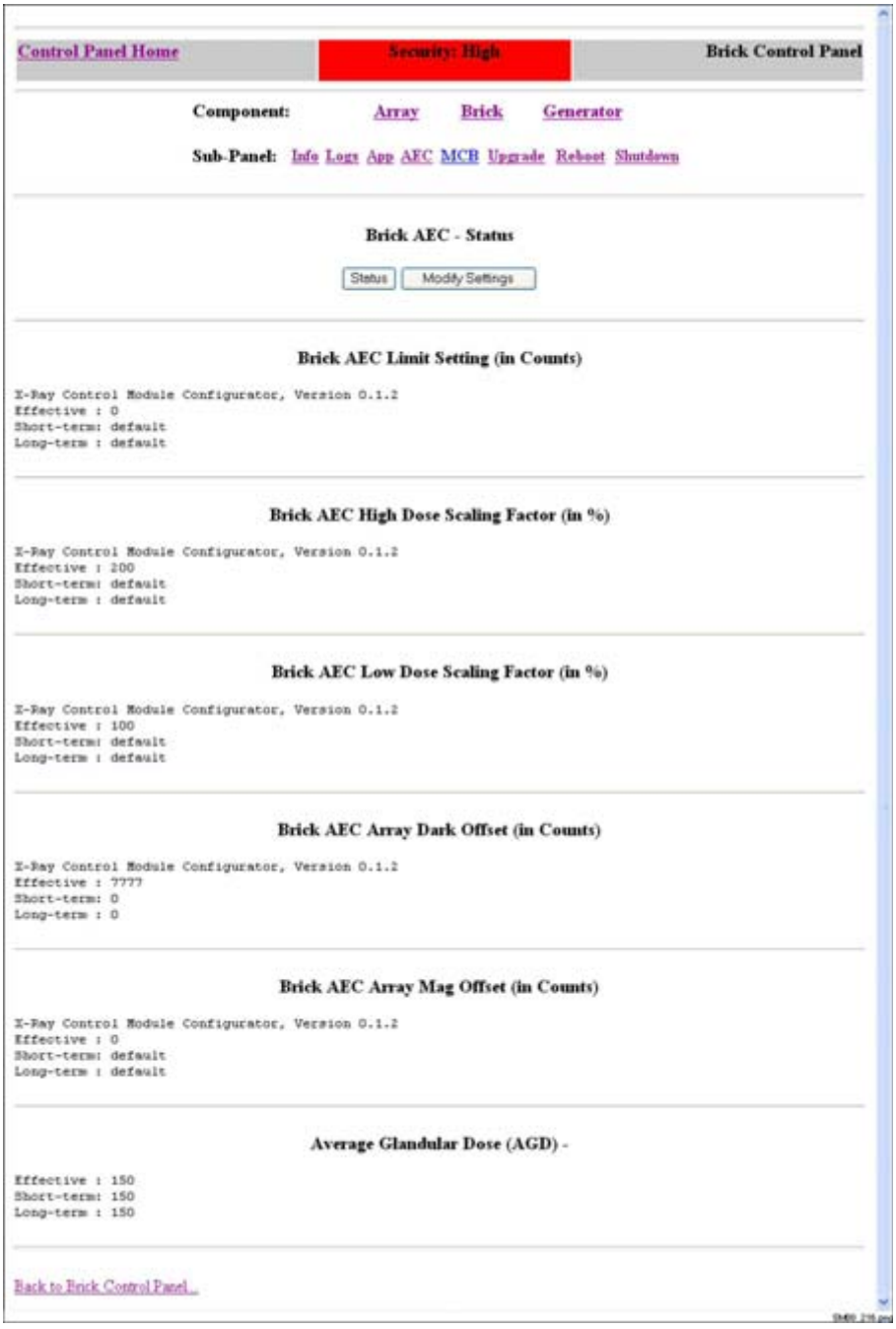

Fig. 21:

Viewing Media Converter Board (MCB) information and upgrading its firmware

NOTE

Viewing MCB information, or upgrading its firmware, is intended to help the Support staff when troubleshooting PXCM problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view MCB firmware information, click the **Brick Firmware** link on the **Brick Control Panel** page, or the **MCB** link on any of the other **PXCM** pages. The **MCB** page is displayed.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 22:

⚠CAUTION

The MCB page includes an "Advanced" button. This function is intended only to help the Siemens Support staff when troubleshooting AEC problems.

➪ If this function is used, MCB operation may be impaired.

To upgrade the MCB firmware:

1. Click the **Upgrade Firmware** button on the **MCB** page.

   The **Upgrade PXCM Firmware (MCB)** page is displayed.

Fig. 23:

2. Click the **Browse** button. Then navigate to the appropriate MCB firmware file from your acquisition workstation's file system and select it.

   The selected file is displayed in the **Please select the Firmware file to transfer** field.

⚠CAUTION **The PXCM Web Tool does not check whether the appropriate file type has been selected.**

➪ **If you select the wrong file for uploading, the PXCM may stop operating.**

NOTE **To clear your file selection, click the "Reset Form" button.**

3. When you are ready to start the firmware file transfer, click the **Upgrade Now** button.

   The file transfer status is displayed on the page.

4. After the transfer is complete, reboot the PXCM to start up the firmware you have just transferred. For more information, refer to (Rebooting the PXCM / p. 24).

Upgrading the PXCM software

NOTE **Usually, you upgrade the PXCM software only under the guidance of the Siemens Support or if you suspect that the current software is corrupt.**

To upgrade the PXCM software

1. Click the **Software Upgrade** link on the **PXCM Control Panel** page, or the **Upgrade** link on any of the other **PXCM** pages.

   The **Upgrade PXCM Software** page is displayed.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 24:

2. For the **Select the package to be upgraded** option, select **Siemens**.
3. Select whether you want to overwrite all of the PXCM configuration files.

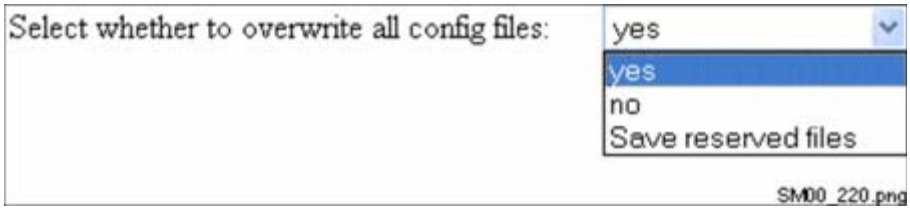

Fig. 25:

   If you select the **Save reserved files** option, specify the files which you want to protect against overwriting in the **Enter Configuration files to be retained** field.

4. Click the **Browse** button. Then navigate to the appropriate PXCM software file from your acquisition workstation's file system and select it.

   The selected file is displayed in the **Please select the file to transfer** field.

NOTE

The PXCM Web Tool does not check whether the appropriate file type has been selected. If you select the wrong file for uploading, the PXCM may stop operating.

5. For the **Select Boot Mode** option, select **normal**, unless directed to select another mode by Siemens Support.
6. Select the **Sync Safe & Normal Modes?** option.

NOTE	**To clear your entries or selections, click the "Reset Form" button.**

7. When you are ready to start the software file transfer, click the **Upgrade** button.

   The file transfer status is displayed on the page.
8. After the transfer is complete, reboot the PXCM to start up the software you have just transferred. For more information about rebooting the PXCM, refer to (Powering the detector on and off / p. 13).

Rebooting the PXCM

To reboot the PXCM, click the **Reboot the Brick** link on the **Array Control Panel** page, or the **Reboot** link on any of the other **PXCM** pages. You will be prompted to confirm the reboot operation.

NOTE	**For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).**

Fig. 26:

Shutting down the PXCM

To shut down the PXCM, click the **Shutdown the Brick** link on the **Array Control Panel** page, or the **Shutdown** link on any of the other **PXCM** pages. You will be prompted to confirm the shutdown operation.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 27:

Generator functions

The generator functions are accessible via the **Generator Control Panel** page.

To display the **Generator Control Panel** page, click one of the **Generator** links on the homepage.

Fig. 28:

Viewing information about the generator

To view information about the generator, click the **Information/Status** link on the **Generator Control Panel** page, or the **Info** link on any of the other **Generator** pages. The **Generator Information - Summary** page is displayed.


WebBrick - PXCM Web Control Interface - Microsoft Internet Explorer provided by Siem...
Control Panel Home
Security: Low
Generator Control Panel
Component:
Array
Brick
Generator
Sub-Panel:
Info
Config
Xray Generator Information - SUMMARY
Summary
Detailed
Advanced
Generator Version
Siemens "M3000 Nova" "1.0 03-11-12"
Current Brick Mode:
Brick is in Normal mode.
Current Brick Errors:
No active errors
Current Array Mode:
Array is in Normal mode.
Current Array Errors:
No active errors
X-Ray Lock:
Generator lock:
System : BUSY
Array : ready
Brick : ready

Fig. 29:

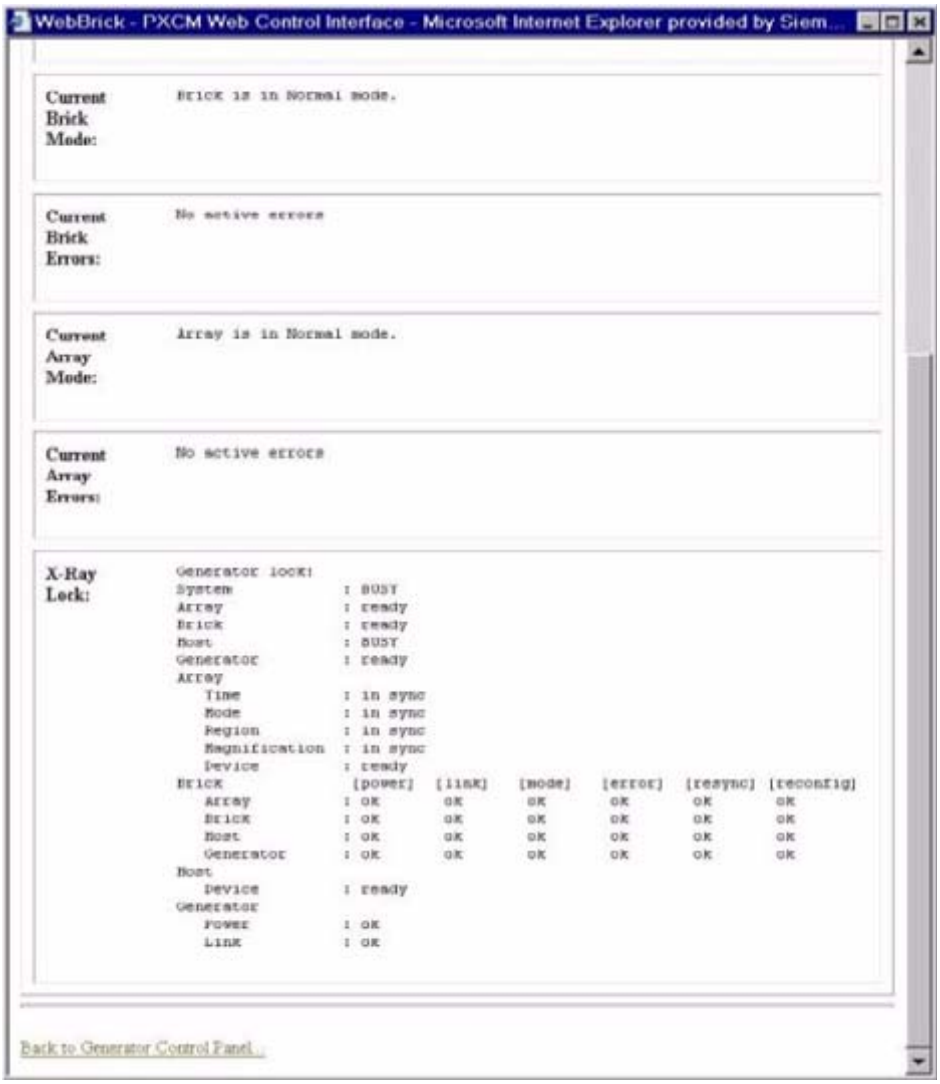

Fig. 30:

To view more detailed generator information, click the **Detailed** button. A sample of the detailed generator information is shown on the next page.

NOTE

The Generator Information page also includes an "Advanced" button for displaying even more detailed information. However, this advanced information is intended only to help the Siemens Support staff when troubleshooting generator problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.


WebBrick - PXCM Web Control Interface - Microsoft Internet Explorer provided by Siem...
Control Panel Home
Security: Low
Generator Control Panel
Component:
Array
Brick
Generator
Sub-Panel:
Info
Config
Xray Generator Information - DETAILED
Summary
Detailed
Advanced
Generator Version
Siemens "B3000 Nova" "1.0 03-11-12"
Current Brick Mode:
Brick is in Normal mode.
Current Brick Errors:
No active errors
Current Array Mode:
Array is in Normal mode.
Current Array Errors:
No active errors
X-Ray Lock:
Generator lock:
System : BUSY
Array : ready
Brick : ready

Fig. 31:

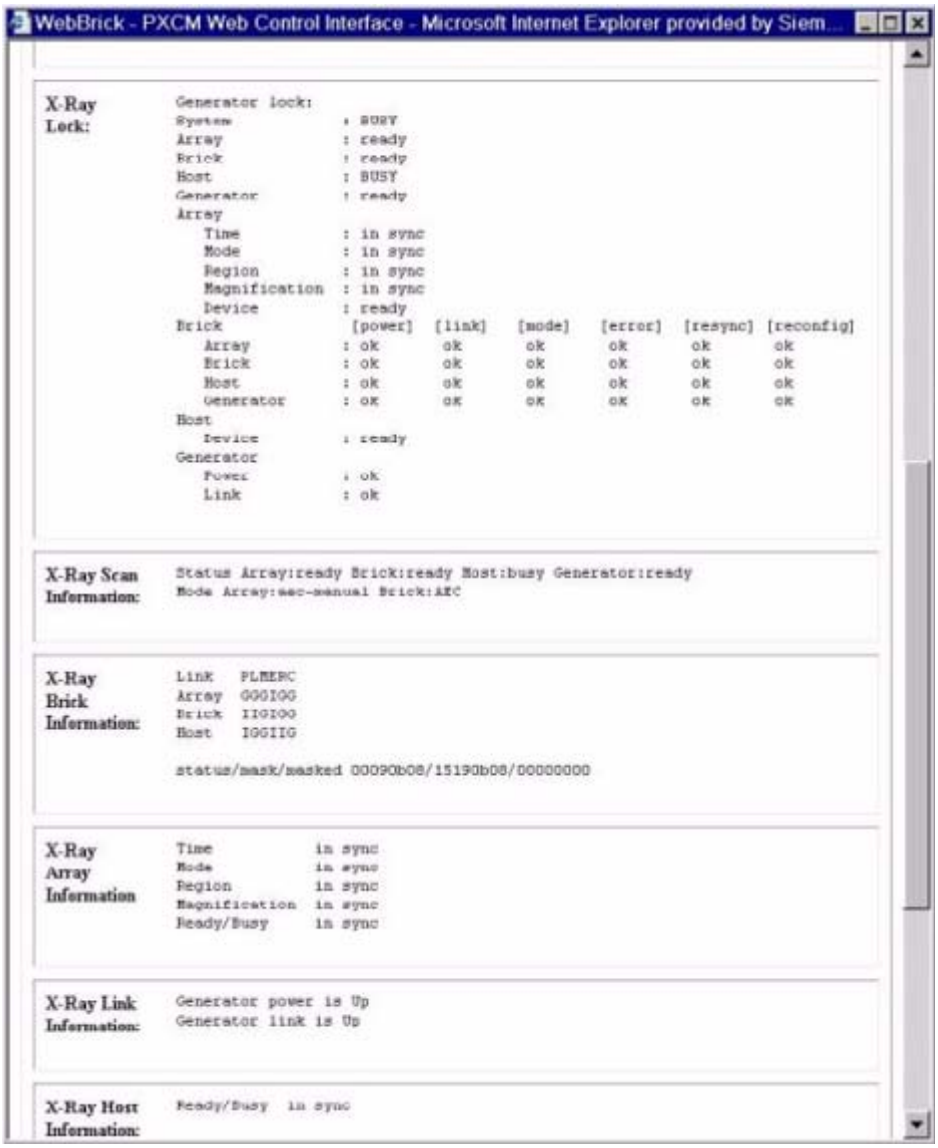
WebBrick - PXCM Web Control Interface - Microsoft Internet Explorer provided by Siem...
X-Ray Lock:
Generator lock:
System : BUSY
Array : ready
Brick : ready
Host : BUSY
Generator : ready
Array
Time : in sync
Mode : in sync
Region : in sync
Magnification : in sync
Device : ready
Brick [power] [link] [mode] [error] [resync] [reconfig]
Array : ok ok ok ok ok ok
Brick : ok ok ok ok ok ok
Host : ok ok ok ok ok ok
Generator : ok ok ok ok ok ok
Host
Device : ready
Generator
Power : ok
Link : ok
X-Ray Scan Information:
Status Array:ready Brick:ready Host:busy Generator:ready
Mode Array:sec-manual Brick:AEC
X-Ray Brick Information:
Link PLMERC
Array GGGIGG
Brick IIGIOO
Host IGGIIG
status/mask/masked 0009Ob08/15190b08/00000000
X-Ray Array Information
Time in sync
Mode in sync
Region in sync
Magnification in sync
Ready/Busy in sync
X-Ray Link Information:
Generator power is Up
Generator link is Up
X-Ray Host Information:
Ready/Busy in sync

Fig. 32:

Fig. 33:

Viewing and modifying the generator configuration

NOTE

Viewing or modifying the generator configuration is intended to help the Siemens Support staff when troubleshooting system problems. For this reason, you will usually use this function only under the guidance of the Siemens Support staff.

To view generator configuration information, click the **Configure Generator** link on the **Generator Control Panel** page, or the **Config** link on any of the other **Generator** pages. The **Generator Configuration - Status** page is displayed.

NOTE

For security reasons, you may be prompted to enter a login name and password before executing this function. For more information, refer to (Function security levels and login prompts / p. 5).

Fig. 34:

To change the generator configuration settings

1. Click the **Modify Settings** button on the **Generator Configuration** page.

   The **Generator Configuration - Modify Settings** page is displayed.

Fig. 35:

2. Select the **Duration of Change** option to specify for how long you want to enable the new scan timeout value.

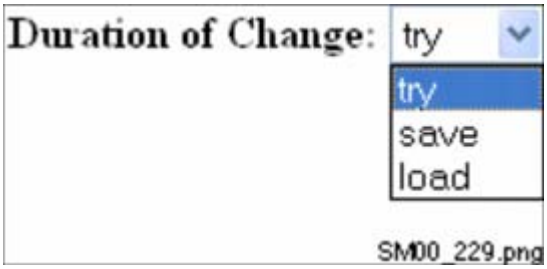

Fig. 36:

NOTE	**To clear your selection and entry, click the "Reset" button.**

3. In the **Scan Timeout Value** field, enter the timeout value (in seconds).
4. To save your modifications, click the **Change Scan Timeouts** button.

Factory service functions

The **Factory Service** functions permit you to view a summary of information about the detector, the PXCM, and the generator. It also allows you to save critical logs to files that can be sent to Siemens Support for troubleshooting analysis.

NOTE	**The log files are intended to help the Siemens Support staff when troubleshooting system problems. For this reason, you will usually use the factory service functions only under the guidance of the Siemens Support staff.**

The **Factory Service** functions are accessible via the **Factory Service Control Panel** page.

To display the **Factory Service Control** Panel page, click the **Factory Service** link on the homepage.

The summary information is displayed on the page. The page also includes a listing of the available logs.

To **save** the PXCM run-time statistics to an archive and compressed file, click the **Brick Run-Time Stats** link. In the indicated dialog box, you can name and save the file in the acquisition workstation's file system.

To **save a log** to a file, right-click the link, then choose **Save Target As** from the pop-up menu. In the indicated dialog box, you can name and save the log file in the acquisition workstation's file system.

To **view a log**, click its link. The log contents display on a new page.

Chapter	Page	Changes
All	All	Converted to DMS.
Introduction	4	Updated start of BRICK software for VA11A
Generator functions	Figure 28 and 29	Updated figures.

36 Changes to previous version